

In the Specification

Please substitute the following paragraph on page 3, beginning at line 5:

Many medications, herbal remedies and procedures have side affects that contribute to cognitive dysfunction. Because of these side effects patients may choose to discontinue medication or treatment (such as ECT) which has a detrimental effect on treatment. Currently, there are no medications approved for helping to alleviate these symptoms. The invention describes a novel treatment for individuals who experience various side effects of cognitive dysfunction. The invention additionally describes how these medications may enhance cognitive function in individuals with normal cognitive functioning who might benefit from this type of enhancement. The subject invention further provides materials and methods for the treatment, prevention, or ~~ameliorate~~ amelioration of medication-induced cognitive dysfunction comprising the administration of medications or compositions comprising one or more selective norepinephrine reuptake inhibitors (SNRI) and/or bupropion.

Please substitute the following paragraph on page 3, beginning at line 18 through to page 4, line 2:

The subject invention provides materials and methods for the treatment, prevention, or ~~ameliorate~~ amelioration of medication-induced cognitive dysfunction comprising the administration of medications or compositions comprising bupropion and/or one or more selective norepinephrine reuptake-~~inhibitor~~ inhibitors (SNRI). Non-limiting examples of SNRI include reboxetine, atomoxetine, oxaprotiline, desipramine, nisooxetine, ludiomil, and fezolamine. Compositions comprising one or more SNRI can be co-administered with the affecting medication. Likewise, compositions comprising bupropion and, optionally, one or more SNRI can be co-administered with an affecting composition. Reboxetine is a clinically effective antidepressant drug that does not tend to cause cognitive dysfunction, unlike selective serotonin reuptake inhibitors (Michelson D, Adler L *et al.*, 2003). Another one of these types of medications is atomoxetine (~~Strattera~~ STRATTERA) which is FDA approved for Attention Deficit/ Hyperactivity Disorder (ADHD). ~~Strattera~~ STRATTERA is also a clinically effective and safe treatment for ADHD (Pliszka SR). In various aspects of the invention, the compositions used in this method of the subject invention can exclude

polypeptides and/or individual amino acids.

Please substitute the following paragraphs on page 4, beginning at line 26 through to page 6, line 9:

In addition to medication-induced cognitive dysfunction, medical procedures can also be associated with cognitive dysfunction with many individuals being at risk of perioperative cognitive dysfunction (Hirsch CH, 1995). In ~~particular~~ particular, neurocognitive changes have been noted following orthopedic interventions, patients with incomplete or heavy pain control (Duggleby W, Lander J, 1994), post coronary artery bypass graft (Haddock CK, Poston WS *et al.*, 2003), following craniectomy (Ellis K, Speed J *et al.*, 1998), carotid endarterectomy procedures (Heyer EJ, Sharma R *et al.*, 2000), and electroconvulsive therapy (ECT) (Neylan TC, Canick JD, Hall SE *et al.*, 2001). Older patients are at particular risk of perioperative morbidity due to the limited flexibility and reserve of their body systems. Thus, the subject invention also provides methods of: 1) reducing the incidence of; 2) treating; 3) preventing; or 4) ameliorating cognitive dysfunction that is associated with, or arises from, medical procedures such as, but not limited to, surgical interventions (procedures), incomplete or heavy pain control, or electroconvulsive therapy comprising the administration of compositions comprising bupropion and/or one or more SNRI to an individual. Non-limiting examples of SNRI include reboxetine, atomoxetine, oxaprotiline, desipramine, nioxetine, ludiomil, and fezolamine. In certain aspects of the subject invention, compositions comprising bupropion are administered to the patient. In other aspects of the invention, bupropion and one or more SNRI are administered to the patient. Yet other aspects of the invention provide for the administration of compositions comprising one or more SNRI to the patient. Additionally, compositions comprising bupropion and/or SNRI can be administered before, during, and/or after a particular medical procedure. In various aspects of the invention, the compositions used in this method of the subject invention can exclude polypeptides and/or individual amino acids.

Stressful situations are well known to evoke subtle psychophysical changes in both speech and language performance, even in individuals who usually function in the normal cognitive range. Under certain stressful circumstances persons may experience changes in voice intensity and quality, reductions in speech fluency, difficulty ~~word~~ in word finding, increased mental slowness, verbal

confusion, over use of filled pauses (Phillips GM, Sokoloff KA, 1979). In addition, the use of recreational substances (drugs) to ameliorate these responses often results in associated negative side effects. Thus, the subject invention provides methods of ~~methods of:~~ 1) reducing the incidence of; 2) treating; 3) preventing; or 4) ameliorating cognitive dysfunction that is associated with, or arises from, a stressful situation comprising the administration of bupropion and/or one or more SNRI to the individual. Compositions comprising bupropion and/or one or more SNRI can be administered before the stressful situation arises or during the course of the stressful situation. In various aspects of the invention, the compositions used in this method of the subject invention can exclude polypeptides and/or individual amino acids.

Please substitute the following paragraph on page 15, beginning at line 3:

Many medications, herbal remedies and procedures have side affects that contribute to cognitive dysfunction. Because of these side effects patients may choose to discontinue medication or treatment (such as ECT) which has a detrimental effect on treatment. Currently, there are no medications approved for helping to alleviate these symptoms. The invention describes a novel treatment for individuals who experience various side effects of cognitive dysfunction. The invention additionally describes how these medications may enhance cognitive function in individuals with normal cognitive functioning who might benefit from this type of enhancement. The subject invention further provides materials and methods for the treatment, prevention, or ~~ameliorate~~ amelioration of medication-induced cognitive dysfunction comprising the administration of medications or compositions comprising at least one selective norepinephrine reuptake inhibitors (SNRI) and/or bupropion.